

Plasticulture '08 Best Paper Award

Congress organizers strive to offer the highest level of presentations by researchers, educators, and industry representatives. The Society recognizes authors who are judged as having prepared the highest quality paper by the presentation of the Best Paper Award.



Dr. Bernard A. Kratky

Growing Lettuce by a Float-Support Non-Circulating Hydroponic Method in Hawaii and Pennsylvania

Co-authors: M.D. Orzolek and W.L.Lamont
The Pennsylvania State University

Dr. Kratky is a Horticulturist with the University of Hawaii at Manoa, serving in the Department of Tropical Plant and Soil Sciences. He is located at the Beaumont Agricultural Research Center in Hilo. His research there has focused on plasticulture, culture and management of vegetable crops, non-circulating hydroponic culture, and *ralstonia* control in edible ginger..

After receiving his bachelors degree from the University of Wisconsin in 1967, Bernie continued his studies at Purdue University, receiving his Masters in 1969 and Doctorate in 1971. In sabbatical studies he has completed research in Wellesbourn, UK; Shanhou, Taiwan; Gatton, Australia; and Madison, Wisconsin. He holds five US patents including two for non-circulating hydroponic plant growing systems. This paper is his fourth presentation at the National Agricultural Plastics Congress.

In addition to the research reported in his award-winning paper, Bernie's current projects include development of a non-circulating sub-irrigation hydroponic method for growing vegetables which does not encourage mosquitoes, *ralstonia* control, development of an inexpensive hydroponic method to produce seed and gourmet potatoes, and hydroponic production of watercress.

The logo for the American Society for Plasticulture (ASP) features the letters 'ASP' in a large, stylized, handwritten-style font.

American Society for Plasticulture



Leadership Awards

Presented at the
34th National Agricultural Plastics Congress

March 8, 2008
Tampa, Florida

American Society for Plasticulture

174 Crestview Drive
Bellefonte, PA 16823
www.plasticulture.org

Pioneer Award

Presented in recognition of work that broadens the importance of ASP through exemplary research and developmental efforts that have contemporary and future impacts to the field of plasticulture.



James W. Garthe, PE

James Garthe is an agricultural engineer and an instructor in the Department of Agricultural and Biological Engineering at Pennsylvania State University.

For more than 15 years, Jim has been a true Pioneer in the field of recovery/capturing the tremendous energy potential trapped in waste agriculture and consumer plastics. Driven by the belief that these materials had tremendous value as an energy source and were not mere waste products to be disposed of in a landfill or buried in the back forty, he has developed several different machines that could take this material, densify it and then burn it to release the tremendous amount of potentially useful BTU's trapped inside. Jim's passion, dedication and leadership to this goal has been an inspiration to others. He has written and made presentations on this issue at past ASP Congresses and many other venues around the country. Jim's research has gone a long way to completing the circle in the life of plastic product from its inception, manufacture, use, collection, and finally recycling or incinerating for its energy value.

Jim joined Penn State in 1978 after a successful engineering career in the private sector. His focus expands beyond plastics to general environmental issues. He carries his breadth of knowledge into his work as an extension specialist. Jim is also active in Penn State's nationally renowned Center for Plasticulture. His participation in a webinar on plasticulture produced at Penn State in 2004 by ASP with the American Plastics Council reached out to media across the country. As a member of the Board of Directors for the American Society for Plasticulture from 2002 to 2005, Jim was an active proponent of recycling issues.

Jim holds degrees in Agricultural Engineering from Clemson University and the University of Idaho.

Distinguished Service Award

Recognizing exceptional or special activity by an ASP member, beyond the typical membership responsibilities.

Dr. Michael D. Orzolek



Dr. Michael Orzolek received his Ph.D. in horticulture at the University of Maryland in 1974, and is currently professor of vegetable crops in the Department of Horticulture at Pennsylvania State University where he has served for the past 26 years. He teaches plant nutrition and his research with vegetables has dealt primarily with nutrition, drip irrigation and use of plastic mulches and low tunnels to obtain earlier maturity and improve yields of warm season crops.

Mike has been a long-time member of ASP and a strong supporter of the Society. He served on the Board from 1994 to 1998, and then served as President in 1999 and 2000. It was during his term as President that ASP hosted the International Congress on Plastics in Agriculture in Hershey, PA. He has also been a long-standing member and contributor to ASP, having chaired the National Agricultural Plastics Congress, moderated paper sessions at past congresses, and served on numerous committees in the Society.

He has also advanced the status of plasticulture as one of the founders in 1998 of the Center for Plasticulture at Penn State. Mike was elected Director of the Center after the first year from the original core members and has been its only Director in the ensuing years. His leadership was instrumental in the Center serving as the focal point for an ASP webinar in 2004 that promoted plasticulture to media throughout the nation.

His dedication to the American Society for Plasticulture and his willingness to invest his time, expertise, and enthusiasm in the Society are exemplified by the vast contribution he has made in presenting papers at almost every Congress since 1991. His collection of research is also represented in dozens of other noteworthy publications.